

# Critical Pathway

## A Study on Development of the Automated Critical Pathway for Patients with Cesarean Section

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### Abstract

The main objectives of this study were: to provide a computerized program for Patients with Cesarean Section in predicting lengths of stay, and to evaluate the model of Automated Critical Pathway in Hospital information System. ; The Results of this study had shown the accessibility to the development of Automated Critical Pathway and can be contributed to aid developing the Automated Critical Pathway for other DRGs. The application of developed Automated Critical Pathway in clinical areas will induce easiness for the users and the substantial effect. (*Journal of Korean Society of Medical Informatics 9-1,37~44, 2003*)

**Keyword** : Cesarean Section, Automated Critical Pathway

## Critical Pathway

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Fig 1.

Table 1. Critical Pathway

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( )	1. DRG 2. DRG 3. Critical Pathway note(Check list) 4. 가 Check list	1. DRG 2. / 3. DRG 4. DRG 5. DRG ( ) 6. Order DRG 7. CP note 8.
( )	1. DRG 2. 3. DRG group 4. 5. 6. / 가	1. List DRG

## Critical Pathway

Table 2.

Pre-Admission order	CBC & Morph & Ptt(1 ), U/A & Morph(1 ), OT/PT(1 ), PT/PTT(1 ) Chest PA(1 ), EKG(1 ) HBsAg, VDRL, Anti-HIV(pre-medication ) F/P/C prep 2U(1 ) Consult( )
Admission order	Tolerate diet, MN NPO Check vital sign( ), Check FHT at admission & OP day Get OP permission, Get pre-medication Skin prep for C/S, Foley insertion (on call) Prep> pitocine 20u, Rx)H/S 1L sig IV with 18 gage send pt to OP room & chart & X-ray
OP day	NPO, SOW(8hr after OP) Check V/S q15min *4, q30min*4, q1hr until stable, Check I/O Cold steam inhalation (if General anesthesia.) Encourage cough & Deep breathing (if General anesthesia.) Sand bag apply on op site, Watch for vaginal bleeding & uterine contraction( ) Rx) H/D 1L sig IV * 1day(30 gtt/min), Rx) 5% D/W 1L sig IV * 1day(30 gtt/min), daily(30 gtt/min) Rx) Analgesics 4A #4 sig IM for 1day,Rx) Analgesics 1A #1 sig IM (prn) Rx) Uterotonic drug 4A #4 sig IM for 1day(if BP, 140/90mmhg) Rx) IV antibiotics * daily (AST)
POD # 1	Clear liquid( ), If 6PM OP S.O.W( ), Clear liquid( ) Check V/S( ), Foley remove 6AM Check self voiding & Residual urine * 2 (prn) Wound Dressing, Analgesics 1A sig IM (prn) Encourage early ambulation, Breast binding
POD # 2- 5	Gas passing order Soft diet, General diet, D/C IV antibiotics & fluid, I&O Rx) PO antibiotics * 4days CBC & Morph & Ptt POD # 3, Stitch out POD #5 5, 4 OPD F/U

4) 4 : Critical Pathway

III.

Order Communicating System

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Critical Pathway

DBMS	MS-Windows 98 MS-Visual Basic 6.0 MS-SQL
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Fig 2.

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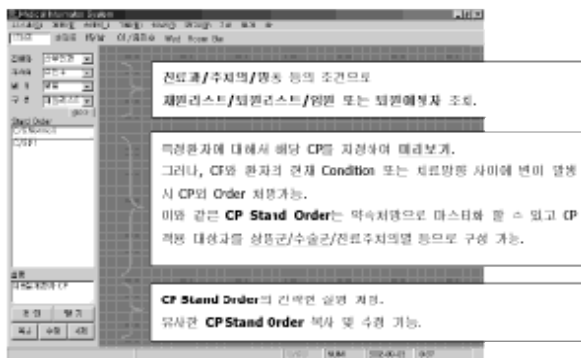


Fig 3.

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### Critical Pathway

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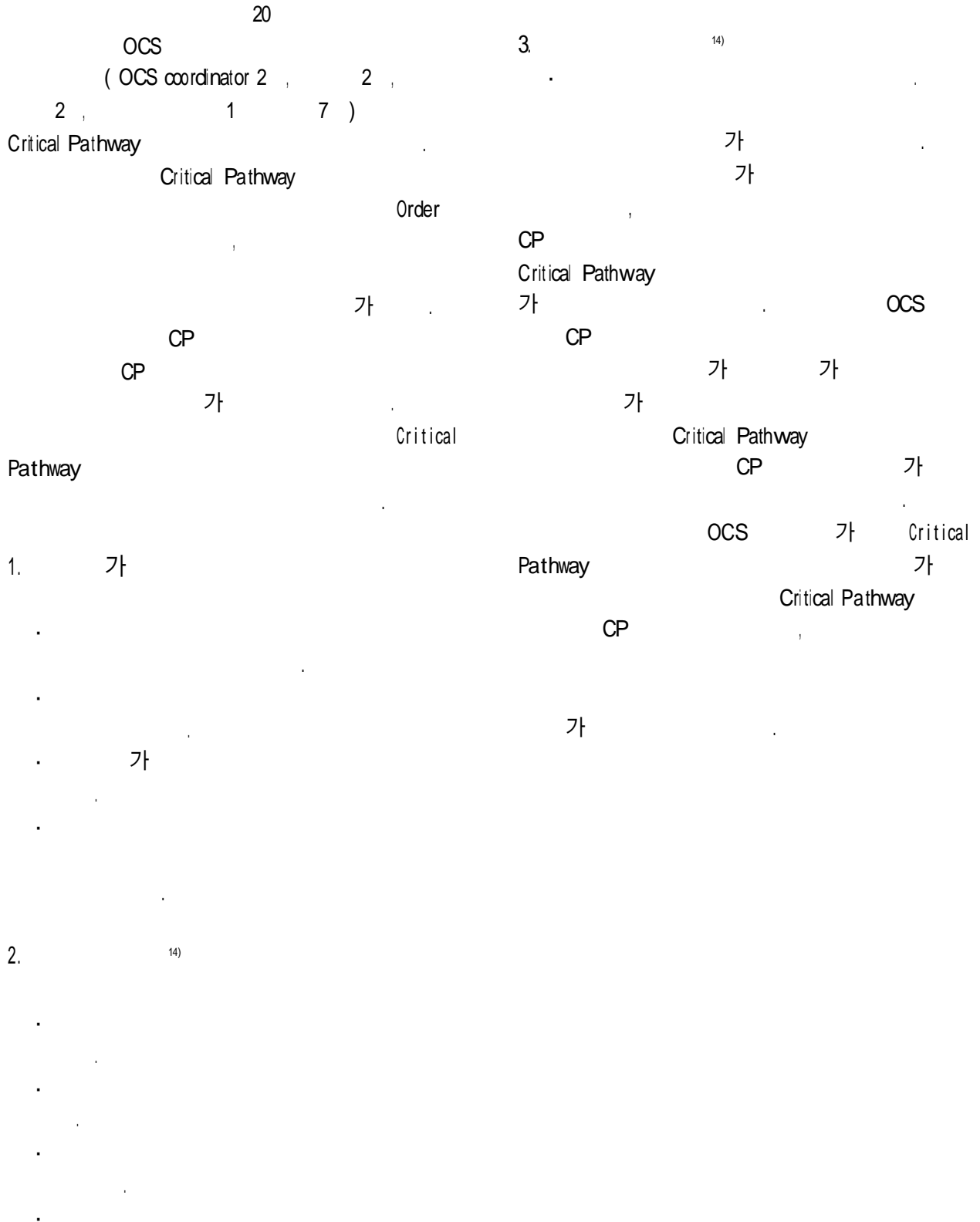
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Fig 4. CP note

#### IV.



## Critical Pathway

1. , DRG 2 가  
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4. , Critical  
 Pathway , 1997
5. , Critical Pathway  
 , 1998
6. , Critical Pathway  
 , 2000
7. , (Critical Pathway)  
 : 400  
 , 2000
8. Nolin CE & Lang CG, An Analysis of the Use  
 and Effect of Care map Tools in Medical  
 Malpractice Litigation, Expert Library(1). South  
 Natick, MA: The Center for Case Management,  
 1994
9. Center for Healthcare Industry Performance Studies.  
 In: Benchmarking Guide. Hospitals & Health  
 Networks 1999(January)
10. , : , 1997
11. , 1992
12. Benchmarking guide. Hospitals & Health Networks  
 1999(January)
13. Center for Case Management, CareMap Creator,  
 South Natick, MA : Center for Case Management,  
 www.cfm.com 1998 (last accessed November,  
 1999)
14. , Critical Pathway  
 , 8(2).